

# **PREFACE**

**Production of petroleum from the reservoir involves multiphase flow of oil, gas and water through conduits, valves and other restrictions. Chokes are normally installed at the wellhead to control the flow of fluids from the well to avoid the damages arising out of excessive withdrawal of fluid from the reservoir. In this thesis a theoretical model developed to predict the performance of surface choke is presented. This model has also been extended to predict the performance of bottomhole chokes. The advantages of using bottomhole choke in oil production are brought out. A method of producing from more than one zone through a single tubing string with the use of bottomhole chokes is presented. Choke size selection procedures for selecting chokes for bottomhole chokes and commingling production with the help of system analysis approach are also presented. Although it is expected, it was not possible to follow SI units in the correlations and calculations because the oil industry still continues to use FPS system of units.**